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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,078	04/19/2004	Brandon M. Beck	T00113	1866

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EXAMINER	
SAXENA, AKASH	
ART UNIT	PAPER NUMBER
2128	

NOTIFICATION DATE	DELIVERY MODE
04/02/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

tmunoz@hamiltonterrile.com

Office Action Summary	Application No.	Applicant(s)	
	10/827,078	BECK ET AL.	
	Examiner	Art Unit	
	AKASH SAXENA	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claim(s) 1-22 has/have been presented for examination based on amendment filed on 01/15/2009.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/15/2009 has been entered.
3. Claim(s) 1, 3, 4 and 22 is/are amended.
4. Claim(s) 1-22 remain rejected under 35 USC § 101.
5. Claim(s) 1-22 remain rejected under 35 USC § 112.
6. Claim(s) 1-22 is rejected under 35 USC § 103.
7. The arguments submitted by the applicant have been fully considered. Claims 1-22 remain rejected and this action is made NON-FINAL.

Response to Remarks for Claim Rejections - 35 USC § 101

Regarding Claim 1 & 3

8. Applicant's remarks on "a method using a computer system", as reading on tied to a particular machine in view of In re Bilski are noted, however the inquiry of practical application and abstract idea are separate determination for rejection under 35 USC 101.

9. As for transformation of physical material from one state to another, the claim does not do that as alleged, as merely the model representing the product is transformed not the actual product. Examiner maintains the rejection for this issue.

10. As for the practical application, applicant has added "for use in answering configuration questions related to the product." Id. However this is general application and not specific application, which can be used for any "product", without specifying which "product" it can be used for. This rejection is maintained for this reason.

Regarding Claim 4

11. Applicant has not clearly disavowed in the claim the use of non-statutory material (program stored on the modulated signal – carrier waves – a form of energy) such as detailed in specification [0149]-[0150] which reads on the computer readable medium. The rejection is therefore maintained.

Response to Remarks for Claim Rejections - 35 USC § 112¶1st

12. Regarding A & B, the rationale for rejection under 35 USC 112 ¶1st is based on the 101 – abstract idea, which is a separate inquiry than the one addressed by In re Bilski. Since the rejection under abstract idea is maintained the rejection under 35 USC 112¶1st is also maintained on the same rationale.

13. Regarding C, applicant has merely pointed to specification [0098]-[0101], without any guidance or specific description how the steps of extending, removing and combining are enabled. Further, even if the cited section may teach the limitation,

the specification cited cannot be imported in to claim. Examiner maintains the rejection.

Response to Remarks for Claim Rejections - 35 USC § 103

(Argument 1) Applicant has argued in Remarks Pg.14-16

> Lichtenberg teaches that a product is represented by a **single model** and does not address "consolidate[ing] multiple configuration models of a product". Id. More specifically, "a product model is used to model relevant aspects of the product." Lichtenberg, para. 0224. "The product model describes components, **attributes for these components, as well as alternatives for each component and values for each attribute.**" Id., para. 0226. "Furthermore the product model comprises a group of rules relating to compatibilities between components and attributes." Id. See also, Lichtenberg, paras. 0234-0261 which describe the product model in detail. Notably, Lichtenberg no where does Lichtenberg discuss "consolidate[ing] multiple configuration models of a product" as recited by claims 1, 3, and 4....
>
> **Thus, the DAG is used to represent all the rules of a single product model and is unrelated to "consolidate[ing] multiple configuration models of a product" as recited by claims 1, 3, and 4...**
>
> **Accordingly, Lichtenberg teaches representing the single model as a directed acyclic graph (DAG), and Lichtenberg's teachings regarding combining DAGs does not teach or suggest "combining the first and second configuration models into a single, consolidated model," Claims 1, 3, and 4.**

(Response 1) Applicant has repeatedly alleged that Lichtenburg's single product model with various alternatives to the components with values and rules is not the same as multiple configurations of applicant's product model. However applicant has failed to provide any argument why the multiple configurations are different and cannot be given broadest reasonable interpretation as product comprising alternatives to components making up various configurations. In fact the specification Fig.9A confirms that the variation is due to various engine alternatives in car model. Examiner finds applicant's argument unpersuasive.

(Argument 2) Applicant has argued in Remarks Pg.16:

> Additionally, Applicants respectfully submit that para. 0006 of Lichtenberg is not referring to a conflict between "multiple configuration models of a product" but is rather referring to alternative choices to be made when configuring a product, i.e. "a specific alternative must be selected for

> each of the components to build the complex product." Lichtenberg, para. 0006. Furthermore, Applicants respectfully submit that paras. 0007- 0008 do not refer to conflicting models but rather relate to (i) configuring a product by choosing alternatives and (ii) "all combinations of the alternatives will not work." Id., para. 0008. For example, if"the front and the rear wheel must be of the same type" then an alternative type rear wheel would be incompatible with a different type of front wheel. Thus, references to alternatives in Lichtenberg and .... all combinations of the alternatives will not work" is not a reference to "combining the first and second configuration models into a single, consolidated model." Claims 1, 3, and 4.

(Response 2) Applicant has not claimed what makes the configuration model different and given the broadest reasonable interpretation the multiple configuration model differ due to their alternatives in the components making various configurations.

(Argument 3) Applicant has argued in Remarks Pg.16:

> Regarding Kramer, the Examiner admits that "Kramer however fails to teach that the DAGs are for consolidating multiple configuration models and limits the teaching to consolidating multiple paths in a non-cyclic way as in a DAG." Office Action, p. 13.

(Response 3) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Specifically in this case the limitation is taught by Lichtenburg.

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Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 1-22 recite a abstract idea of combining two models (DAG) which specification describes as represented by Directed Acyclic Graphs (DAG) (Specification: (110, Fig.2). Combining DAG is a mathematical concept. Binary decision diagram (BDD) is a form of DAG and a paper showing the combining BDD[1] is included as prior art.

Claims 1-22 do not claim any practical application of the combination.

> **Section 2106 [R-2] (Patentable Subject Matter - Computer-Related Inventions) of the MPEP recites the following:**
> *If the "acts" of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter. Schrader, 22 F.3d at 294-95, 30 USPQ2d at 1458-59. Thus, a process consisting solely of mathematical operations, i.e., **converting one set of numbers into another set of numbers, does not manipulate appropriate subject matter and thus cannot constitute a statutory process.***
> *"In practical terms, claims define nonstatutory processes if they:*
> *consist solely of mathematical operations without some claimed practical application (i.e., executing a **"mathematical algorithm"**); or - **simply manipulate abstract ideas**, e.g., a bid (Schrader, 22 F.3d at 293-94, 30 USPQ2d at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31USPQ2d at 1759), **without some claimed practical application**."*

Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As described through these claims, the claimed invention does not physically transform an article or physical object to a different state or thing, so to be eligible for patent protection, the claimed invention as a whole must accomplish a practical application. That is, it must produce a useful,

[1] Symbolic Model Checking An approach to the state explosion problem; Kenneth L. McMillan, May 1992, Pg. 41-44

concrete and tangible result." State Street, 149 F.3d at 1373-74, 47 USPQ2nd at 160102. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept.

Independent claims 1, 3, 4 and 22 all recite the intended use of the combining the DAG in the last step.

MPEP 701 & 2105 states:

> A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In this case the intended use does not result in any structural difference and does not add any limitation to the method, system, or program product claims. The rejection is maintained under this statute.

Regarding Claim 4, 20-21

Claim 4 discloses computer readable medium, which is not explicitly present in the specification; however since specification (149)-(150) discloses use of electronic signal to store the program, this rejection is made as program stored in energy medium is non-statutory. MPEP 2106.01.

Claims 20-21 also disclose computer readable medium and is rejected similarly.

Regarding Claim 22 (New)

System claim 22 is rejected as software per se, as all there is not hardware component disclosed and merely is a collection of algorithmic steps, best interpreted as software per se.

Claim Rejections - 35 USC § 112¶1st

The following is a quotation of the first paragraph of 35 U.S.C. §112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

15. **Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific asserted utility or a well established utility.**

The claimed invention is an abstract idea as explained in the 35 USC 101 claim rejection above. There may be a specific and substantial utility present in the specification, however it is not claimed.

Claims 1-22 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a -specific and substantial-- asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

16. **Further, Claims 1-22 are rejected under 35 U.S.C. §112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a §101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application.** This is how the MPEP puts it:

> ("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35 U.S.C. §101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. §101, then the application **also fails as a matter of law** to enable one of ordinary skill in the art to use the invention under 35 U.S.C. §112."); In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA

> 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention**.") See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-22 are rejected on this basis.

17. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the *written description requirement*. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, based on applicant's argument, that step of determining the conflict is not based on the exclude type of rule, examiner is unclear from the disclosure how the conflict is determined. Please see claim interpretation section and Response to Arguments for 35 USC § 102 Rejection.

18. Claim 22 discloses means for language, however the specification does not disclose specific means for identifying, extending, removing and combining and hence the claim 22 lack written description and enablement as well.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. Claim 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over by U.S. Patent Publication No. 2002/0165701 by Lichtenberg et al (Lichtenberg hereafter), in view of IEEE article "The Combining DAG: A Technique for Parallel Data Flow Analysis by Robert Kramer et al (Kramer hereafter).

Regarding Claim 1

Lichtenberg teaches a method of consolidating multiple configuration models *of a product* in to a single consolidated model (being a directed acyclic graph) among the families and feature of the families (described as component & associated rules) (Lichtenberg: [0076][0094][0062], Fig.1).

Lichtenberg teaches:

> determining if a conflict exists between at least two of the configuration models, wherein the configuration models are organized in accordance with respective directed acyclic graphs, each configuration model includes at least one ancestor configuration model family and a child configuration model family below the ancestor family, a first conflicting configuration model comprises a configuration model that includes a release of a product that is not released in at least a second conflicting configuration model and the product is defined using the ancestor and child configuration model families;

as determining the partial configurations ([0006]) which may be conflicting and only certain configuration out of all the possibilities satisfy the final product requirement ([0007]-[0008]). The ancestral configuration could be understood as configuration for the bike without the 2 possible conflicting gear configuration (as conflicting child configurations).

Lichtenberg teaches:

> extending the ancestor family of the product in the first conflicting configuration model to be compatible with second conflicting configuration model;

as combing two DAG where there is ancestral configuration (as node with same configuration) is identified ([0076]-[0084]).

Lichtenberg teaches:

> restricting child family in the first conflicting configuration model so that the child family is not released in the extension of the ancestor family;

as determining the compatible and non-compatible products where one of the alternatives is selected ([0092]-[0096]).

Lichtenberg teaches:

> combining the configuration models into a single, consolidated model that maintains a non-cyclic chain of dependencies among families and features of families for use in answering configuration questions.

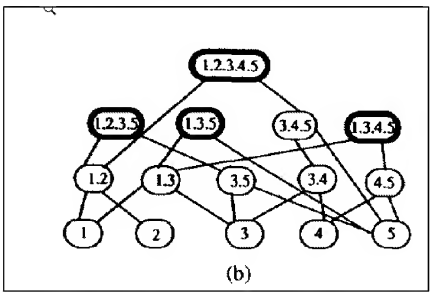
as combing the DAG ([0076]).

Arguendo, even if the amended limitations are not clearly taught by *Lichtenberg, Kramer teaches combining conflicting paths to remove loops to form a DAG and then simplifying and combining the DAGs (See Pg.810 and Fig10).*

Specifically, Kramer teaches the amended limitation:

> "…an ancestor configuration model family space that is different than an ancestor configuration model family space of a second of the conflicting configuration model, and each child configuration model family space constrains the ancestor configuration model family space above the child in accordance with configuration rules of the configuration model to which the child belongs;"

As different ancestral space for the two or more ancestral flows as flows 1.2.3.5, 1.3.5 and 1.3.4.5. The different child flows are shown as 1.2, 1.3, 3.5, 3.4 and 4.5.

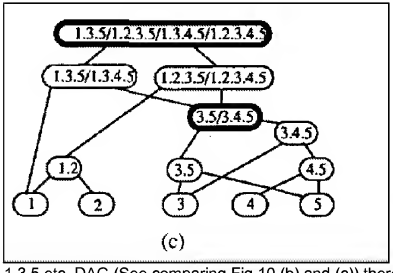


(b)

Specifically, Kramer teaches the amended limitation:

> extending at least one of the ancestor configuration model family spaces of the conflicting configuration models so that the ancestor configuration model family spaces of the first and second conflicting configuration models represent the same ancestor configuration model family space

as extending the ancestral configuration model between two conflicting flows so the ancestral models are combined as shown bolded below in Fig.10 b. Please also see



Kramer Section IV. Construction of the DAG from the Control flow Graph. As can also be seen the dependent conflicting child node 1.3 is removed from the child configuration 1.3, 1.3.5 etc. DAG (See comparing Fig.10 (b) and (c)) thereby meeting the amended limitation ...

> "...removing from the child configuration model family space any configuration space extended in the ancestor of the child configuration family space".

And combining the first and second configuration models as 3.5 and 3.4.5 for example in Fig.10(c).

Kramer however fails to teach that the DAGs are for consolidating multiple configuration models and limits the teaching to consolidating multiple control paths in a non-cyclic way as in a DAG.

Lichtenberg cures this deficiency by applying the technique of combining DAGs, in this case product model DAGs for purpose of product model consolidation and configuration *related to the product*. (Lichtenberg: Fig.1).

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to apply the teachings of Kramer and Lichtenberg to each other. The motivation to combine would have been that Lichtenberg teaches that there are multiple known methodologies to combine the DAG (Lichtenberg: [0076]), however fails to disclose the exact details, which is a deficiency Kramer cures by demonstrating through application (control flow graph DAGs) (Kramer: Fig.10 (b) and (c) and Section IV).

Regarding Claim 2

Lichtenberg teaches detecting any inconsistencies between rules included in the consolidated model (Lichtenberg: [0090]-[0094] – non–compatible products) and attempting to resolve any detected inconsistencies by not allowing the user to select a inconsistent solution (Lichtenberg: [0096]-[0108]).

Regarding Claim 3-4

Limitations presented in claims 3-4 are similar to limitations presented in claim 1 and rejected likewise. Lichtenberg teaches a system (Lichtenberg: [0043]) and a computer program (Lichtenberg: Fig. 2-3, [0272]) for implementing the method of claim 1. *Lichtenberg teaches wherein each model comprises only rules that define a non-cyclic chain of dependencies among families and features of families (Lichtenberg: [0062]-[0073]) and at least one model includes a rule that causes a*

configuration conflict with another model (Lichtenberg: [0062], [0090], [0092]-[0094], [0102]-[0105], [0134]-[-0150] – partial DAG representing features and families, [0162], [0191], [0383] – incompatibility between selected model and reconfiguration). Newly amended limitations are taught by Kramer as well as shown in claim 1 rejection.

Regarding Claim 5

Lichtenberg teaches wherein the configuration models represent configuration models of vehicles (Lichtenberg: Fig.1 – Showing a bicycle).

Regarding Claim 6

Lichtenberg teaches wherein the consolidated model includes only buildable configurations (Lichtenberg: [0406]-[0412] – excluding incompatible selections).

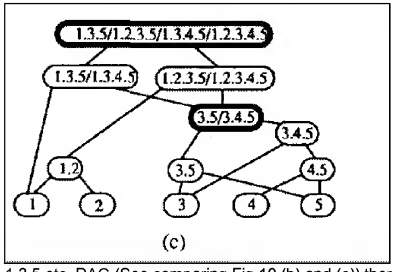
Regarding Claim 7

Lichtenberg teaches *extending the ancestor family of the product in the first conflicting configuration model to be compatible with second conflicting configuration model* as combining the DAG's (Lichtenberg: [0076]-[0084]) further comprises extending a rule from *the first conflicting configuration model into the ancestor family and* (Lichtenberg: [0062], [0076]-[0079]); and repairing the extension of the rule in the child family (Lichtenberg: [0133]-[0150]).

Kramer teaches the amended limitation:

> extending at least one of the ancestor configuration model family spaces of the conflicting configuration models so that the ancestor configuration model family spaces of the first and second conflicting configuration models represent the same ancestor configuration model family space

as extending the ancestral configuration model between two conflicting flows so the ancestral models are combined as shown bolded below in Fig.10 b. Please also see



Kramer Section IV. Construction of the DAG from the Control flow Graph. As can also be seen the dependent conflicting child node 1.3 is removed from the child configuration 1.3, 1.3.5 etc. DAG (See comparing Fig.10 (b) and (c)) thereby meeting the amended limitation ...

> "...removing from the child configuration model family space any configuration space extended in the ancestor of the child configuration family space".

Regarding Claim 8

Lichtenberg teaches combining the *configuration* models into a single, consolidated *configuration* model further comprises loading the *configuration* models into a memory of the computer system (Lichtenberg: [0027]-[0034], [0224]-[0233], [0272]-[0274]); constructing a directed acyclic graph of all rules in all the models (Lichtenberg: [0272]-[0274]); for each *configuration* model, determining which portions of an overall configuration space for which the *configuration* model does not provide a buildable configuration (Lichtenberg: [0008], [0060] and [0090]); and for each *configuration* model, constraining statements of the rules with in the

configuration model to fall within a space of defining features of the *configuration* model (Lichtenberg: [0061]-[0062]).

Regarding Claim 9

Lichtenberg teaches

> "determining which portions of an overall configuration space for which each *configuration* model does not provide a buildable configuration further comprises determining which families are ancestors of families of defining constraints and subtracting a right hand side and a left hand side of each rule of each family that are ancestors of families of defining constraints from a rule representing all buildable configurations."

as providing an intersection to provide all compatible (buildable) or incompatible (un-buildable) products (Lichtenberg: [0085]-[0094]).

Regarding Claim 10

System claim 10 discloses similar limitations as claim 2 and is rejected for the same reasons as claim 2. Claim is amended for grammatical reasons.

Regarding Claim 11

System claim 11 discloses similar limitations as claim 5 and is rejected for the same reasons as claim 5.

Regarding Claim 12

System claim 12 discloses similar limitations as claim 6 and is rejected for the same reasons as claim 6.

Regarding Claim 13

System claim 13 discloses similar limitations as claim 7 and is rejected for the same reasons as claim 7. Further, claim is amended for grammatical reasons.

Regarding Claim 14

System claim 14 discloses similar limitations as claim 8 and is rejected for the same reasons as claim 8. Claim is amended for grammatical reasons.

Regarding Claim 15

System claim 15 discloses similar limitations as claim 9 and is rejected for the same reasons as claim 9. Claim is amended for grammatical reasons.

Regarding Claims 16-21

Computer program product claims 16-21 disclose similar limitations as claim 2, 5-9 and are rejected for the same reasons as claims 2, 5-9 respectively.

Regarding Claim 22

Limitations presented in claim 22 are similar to limitations presented in claim 1 and rejected likewise. No specific support was cited for "means for" language and is this claim is interpreted ordinarily.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKASH SAXENA whose telephone number is (571)272-8351. The examiner can normally be reached on 8:00- 6:00 PM Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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